

**ABSTRACT**

The present invention relates to the use of  
ligands for the FLK-1 receptor for the modulation of  
angiogenesis and vasculogenesis. The invention is  
based, in part, on the demonstration that Flk-1  
5 tyrosine kinase receptor expression is associated with  
endothelial cells and the identification of vascular  
endothelial growth factor (VEGF) as the high affinity  
ligand of Flk-1. These results indicate a major role  
10 for Flk-1 in the signaling system during  
vasculogenesis and angiogenesis. Engineering of host  
cells that express Flk-1 and the uses of expressed  
Flk-1 to evaluate and screen for drugs and analogs of  
VEGF involved in Flk-1 modulation by either agonist or  
15 antagonist activities is described.

15 The invention also relates to the use of FLK-1  
ligands, including VEGF agonists and antagonists, in  
the treatment of disorders, including cancer, by  
modulating vasculogenesis and angiogenesis.

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